AMENDMENTS TO THE CLAIMS:

Claims 1, 3-5, 8, are 10 are pending in this application. Original claims 1, 3-5, 8, are 10 have been amended. Claims 2, 6, 7, 9, 11, and 12 have been cancelled.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An authentication device including a detection section generating a signal, an authentication section that authenticates the identity of a person based on time-series data, and a sensor comprising:

a detection circuit section for generating a signal~~;that detects variance in friction between a finger and a surface of the detection section when relative movement between the surface of the detection section and the finger occurs; and~~

a piezoelectronic element protruding therefrom, and

an authentication section that authenticates the identity of a person based on time-series data representing variance in friction detected at the detection section,

wherein said piezoelectronic element detects a fingerprint and variance in friction when relative movement between the piezoelectronic element and a finger occurs, said detection circuit section generates a signal representing a variance in friction between the piezoelectronic element and finger based on the detected fingerprint, and said authentication section authenticates the identity of a person based on time-series output volatage data representing variance in friction generated by the

detection circuit section.

Claim 2 (Cancelled):

Claim 3 (Currently Amended): The authentication device according to claim 1, wherein the authentication section comprises:

a template storing section that stores template data to be compared with time-series data representing variance in friction detected at the detection circuit section;

a similarity calculation section that calculates similarity between time-series data representing variance in friction detected at the detection circuit section and the template data stored in the template storing section; and

a similarity determination section that determines whether the similarity calculated in the similarity calculation section is greater than a certain similarity or not.

Claim 4 (Currently Amended): The authentication device according to claim 3, wherein the similarity calculation section calculates similarity between the time-series data and the template data by using a DP matching technique.

Claim 5 (Currently Amended): The authentication device according to claim 3, wherein the authentication section comprises:

a data quality determination section that determines whether time-series data representing variance in friction detected at the detection circuit section is appropriate for authentication or not, and~~wherein~~

the similarity calculation section calculates similarity between the time-series data determined appropriate for authentication at the data quality determination section and the template data.

Claim 6 (Cancelled):

Claim 7 (Cancelled):

Claim 8 (Currently Amended): An~~The~~ authentication system according to claim 1[[6]], wherein the detection circuit section~~device~~ compresses time-series data obtained by detecting variance in friction between a finger and the detection circuit section~~device~~ to send out the compressed data to the authentication device, and ~~wherein~~ the authentication device decompresses the compressed data sent from the detection circuit section~~device~~ to recover the time-series data and performs authentication based on the recovered time-series data.

Claim 9 (Cancelled):

Claim 10 (Currently Amended): Then sensor according to claim 1[[9]], comprising:

a supporting section that supports a finger placed on the sensor,

wherein said supporting section has two slopes lowering toward the center at both sides, with a center part in the middle of the slopes and being provided with a rectangular aperture guided along slopes and on each side, and the piezoelectronic element~~detection section~~ is located to touch the finger supported by the supporting section.

Claim 11 (Cancelled):

Claim 12 (Cancelled):